Fig.1

Fig.2

Fig.3

Fig.4

Fig.5

RMe<sub>2</sub>Ge S 
$$n$$
-BuLi, -50°C; ICH<sub>2</sub>CH<sub>2</sub>I, RMe<sub>2</sub>Ge S I dark (98%) Hex

Fig.6

Fig.7

step 1: CsF, DFM, 60°C (99%); step 2: n - BuLi, -50°C; ICH<sub>2</sub>CH<sub>2</sub>I (98%) step 3: 9, Pd(PPh<sub>3</sub>)<sub>4</sub>, DFM, 60°C, double-couple: repeat steps 3-4 (>90%)

Hex

Fig.8

RMe<sub>2</sub>Ge 
$$\langle S \rangle$$
 SiMe<sub>3</sub>  $| Y \rangle S \rangle Z$   $| Y^E \rangle = H$ , I, Br, Cl and other E  $| Z^E \rangle = H$ , I, Br, Cl and other E  $| Y^N \rangle = Z^N \rangle = H$   $| Y^{CC} \rangle = Ar$ , R

Fig.9

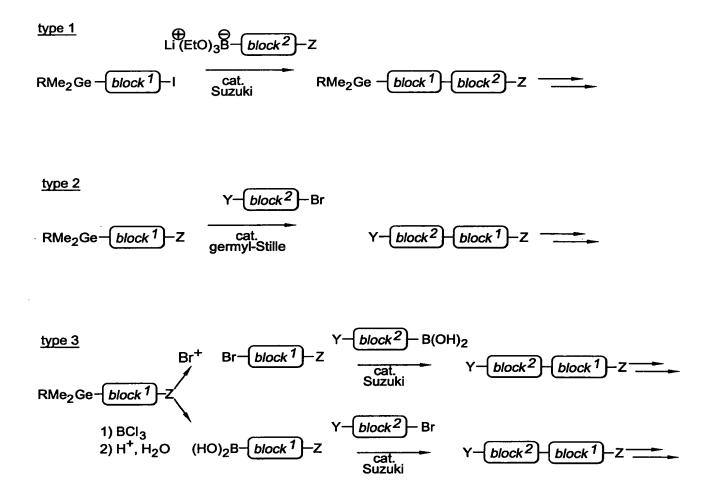


Fig.10

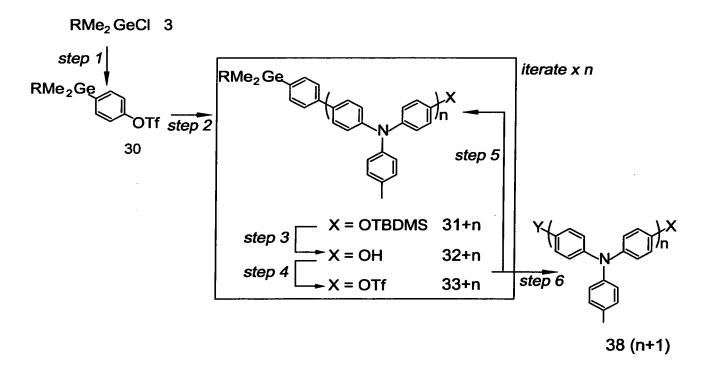


Fig.11

Fig.12

Fig.13

## Fig.14

EtO OH EtO OTf 
$$\frac{Tf_2O}{Pyridine\ 0^{\circ}C,\ 30\ min}$$
 33

Fig.15

Fig.16

Fig.17